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**ON QUANTUM-HOLOGRAPHIC BASES &
FRONTIERS OF INTEGRATIVE MEDICINE &
TRANSPERSONAL PSYCHOLOGY
PSYCHOSOMATIC, EPISTEMOLOGICAL &
SPIRITUAL IMPLICATIONS**

Dejan Raković

**Faculty of Electrical Engineering,
University of Belgrade, Serbia**

rakovicd@etf.bg.ac.rs

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STRESS & ANTI-STRESS

HOLISTIC QUANTUM-INFORMATIONAL FRAMEWORK

Dejan Raković

**Faculty of Electrical Engineering,
University of Belgrade, Serbia**

rakovicd@etf.bg.ac.rs

www.dejanrakovicfund.org

Abstract. We hereby focus on quantum-holographic bases & frontiers of integrative medicine & transpersonal psychology, with deep implications for understanding psychosomatics & spirituality. In the context of quantum-informational holistic acupuncture-based & consciousness-based approaches and techniques, their goal would be resonant stimulation of electromagnetic psychosomatically disordered quantum state (acupuncture palpatory painful or psychologically traumatic, as one of hundreds possible disordered states) thus enabling that its disordered initial memory attractors are one by one bioresonantly excited (similarly to annealing procedure in artificial neural networks) becoming shallower and wider on the account of deepening of (energy-dominating) attractor of healthy quantum state (acupuncture palpatory painless or psychologically non-traumatic) – which is then altogether quantum-holographically projected on lower quantum-holographic cellular level, thus changing expression of genes. However, when this process is hindered by transpersonal entangled blockages in the energy-state space of EM field of acupuncture system / consciousness (and numerous laboratory tests are revealing evidence of entangled minds i.e. extrasensory experiences in a quantum reality) – then memory attractors of quantum-holographic network of field-related collective consciousness should be removed as well (via prayer or circular (psycho / energy) therapies from all relevant meta-positions included in the problem, thus performing spiritual integration of personality which initiate the process of permanent healing as suggested by experiences of volunteers in post-hypnotic regressions).

So, all these holistic acupuncture-based & consciousness-based approaches and techniques can be treated as quantum-informational therapies, by imposing new healing boundary conditions in the energy-state space of acupuncture system / (individual & collective) consciousness – with significant global psychosomatic implications of the necessity of including three front lines of integrative psychosomatic medicine. The aforementioned studies are in line with re-awakened interest in scientific study of consciousness in recent decades (with indications of appearance of grand synthesis of two modes of knowledge, indirectly-rational & directly-mystical, in the framework of emerging quantum-holographic paradigm) – where the role of each individual becomes indispensable due to influence & care for collective mental environment, which is fundamental question of mental hygiene & civic & spiritual morality. It should be noted that three essential aspects of any comparative study of science and spirituality are hereby included: (i) utilitarianism and / or limitations of psychosomatic transpersonal practices of tribal traditions, meditation practices of the East, and prayer practices of the West, in healing or salvation of souls; (ii) epistemology of the two modes of knowledge, indirectly-rational and directly-mystical; and (iii) phenomenology of transpersonal-mystical, near-death, out-of-body, and extrasensory states of consciousness.

Keywords: *quantum-holographic framework, integrative medicine, transpersonal psychology, psychosomatics, epistemology, spirituality.*

INTRODUCTION

Despite the involved huge financial & intellectual resources in biomedical research & health care, human health is still jeopardized by numerous **psychosomatic diseases**, which find the fertile soil in modern man exposed to everyday **stress**.

Since modern partial methods have not shown the desired efficacy in the prevention / treatment of psychosomatic disorders, new approaches are needed, which will include methods of **integrative biophysics**, oriented to **holistic healing the person as a whole** rather than disease as a symptom of disorder whole, implying their deeper **quantum-holographic origin**.

In the focus of these *quantum-holistic methods* are **acupuncture system & consciousness** (which have **quantum-informational structure** of **quantum-holographic Hopfield-like associative neural network**, within *Feynman's propagator version of quantum mechanics* [8-15,27]) – that are closely related within the fast developing **integrative medicine** [1] & **transpersonal psychology** [2], with an ideal to achieve & maintain a state of *complete physical, mental & social well-being* [3].

The aforementioned studies are in line with re-awakened interest in fundamental & applied **holistic research** in past decades [1-150], indicating the occurrence of **grand synthesis of two modes of knowledge, indirect-rational & direct-mystical**, within the framework of extended **quantum-holographic paradigm** – where **the role of each individual** becomes **indispensable due to influence & care for collective mental environment & social well-being** [1-26].

And can help us realize that all our **partial rationalizations** are still **only approximations** of **fundamentally-holistic reality**, and that all **divisions** that separate us harmlessly at first & then spontaneously give birth to big conflicts – are **tragic misunderstanding** of spiritually immature (historical) epoch of civilization [23-26].

ON QUANTUM-HOLOGRAPHIC BASES & FRONTIERS OF INTEGRATIVE MEDICINE & TRANSPERSONAL PSYCHOLOGY: PSYCHOSOMATIC IMPLICATIONS

As demonstrated by **quantum-coherent characteristics** of Russian-Ukrainian school of **microwave resonance therapy** (MRT) [42-49] (*highly resonant electromagnetic (EM) microwave (MW) sensory response of disordered organism, biologically efficient non-thermal MW radiation of extremely low intensity, and neglecting MW energy losses alongside acupuncture meridians*) – **acupuncture system** is the only **manifestly macroscopic quantum system** in our body (while brain still seems not to be [34]).

This is the reason that **consciousness** (characterised by **macroscopic quantum-like holistic in-deterministic manifestation of free will** [7-9,12-19,37-40], *psychosomatic disorders* [6-9,12-19] & *meridian psycho / energy therapies* [71,72], *consciousness pervading body* [40], *transitional & altered states of consciousness* [7-9,12-19,41]) – is related to **acupuncture system's quantum-coherent EM MW field** (ultralowfrequency (ULF) or radiofrequency (RF) / lowfrequency (LF) modulated) in the framework of **our biophysical quantum-holographic model of consciousness** [6-9,12-19] (cf. Fig. 1).

In the context of *acupuncture-based & consciousness-based approaches and techniques of EM field-related quantum-informational integrative medicine*, their goal would be a **bioresonant excitation** of psychosomatically disordered (**acupuncture-channel palpatory-painful / psychologically traumatic**) state (as one of hundreds possible disordered states [55]) thus enabling that its initial memory attractor is resonantly excited (similar to *annealing procedure* in artificial neural networks [31]) becoming shallower & wider on the account of deepening of (energy-dominating) attractor of healthy (**acupuncture-channel palpatory painless / psychologically traumatic-free**) state (cf. Fig. 1) – which is then altogether *quantum-holographically projected* on lower quantum-holographic cellular level, thus *changing the expression of genes* [6-18].

Thus, *all these holistic approaches & techniques* might be considered as **quantum-informational therapies**, via imposing **new healing boundary conditions in the energy-state space of acupuncture system / (individual & collective) consciousness**.

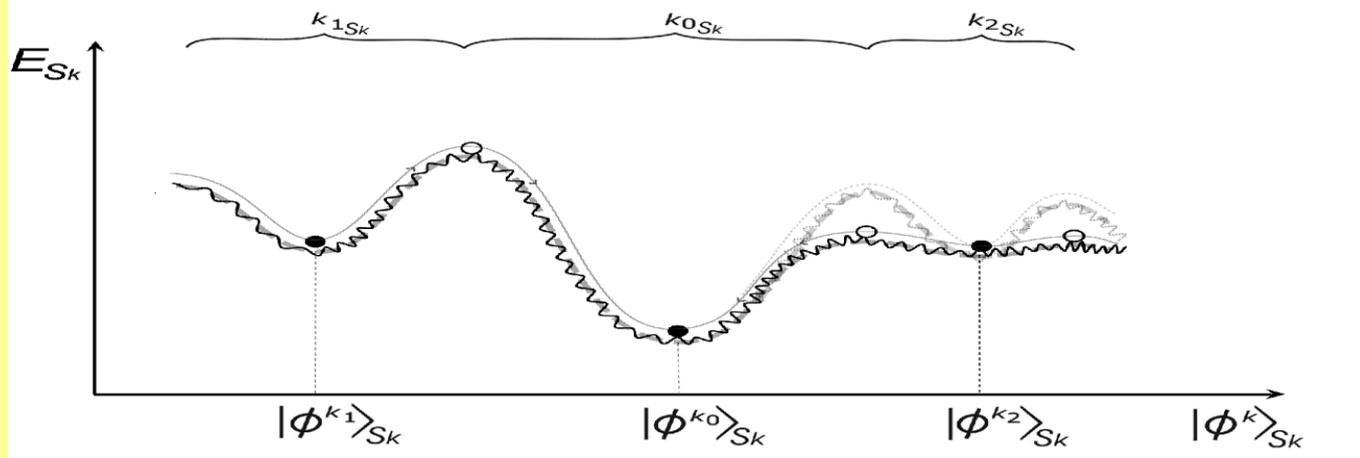


Figure 1. Schematic presentation of the adaptation of memory attractors in the energy-state ($E_{S_k}(\phi^k)$) hypersurface of the *quantum-holographic memory* of various hierarchical levels of biological *macroscopic open quantum systems* S_k (*local cell's biomolecular protein-target, local acupuncture system-consciousness, or nonlocal out-of-body consciousness-collective consciousness*) [7-16]:

$$G(r_2, t_2; r_1, t_1) = \sum_{i=1}^P \phi^{k_i}(r_2, t_2) \phi^{k_i*}(r_1, t_1) = \sum_{i=1}^P A_{k_i}(r_2, t_2) A_{k_i}^*(r_1, t_1) e^{\frac{i}{\hbar}(\alpha_{k_i}(r_2, t_2) - \alpha_{k_i}(r_1, t_1))}$$

It should be pointed out that Nature presumably has chosen elegant *biological room-temperature solution for quantum-holographic information processing*, permanently fluctuating between quantum-coherent $|\phi^k(t)\rangle_{S_k} =$

$\sum_i c_{k_i}(t) |\phi^{k_i}\rangle_{S_k}$ and classically-reduced $\hat{\rho}_{S_k}^k(t) = \sum_i |c_{k_i}(t)|^2 |\phi^{k_i}\rangle_{S_k S_k} \langle \phi^{k_i}|$ states of the biological macroscopic open quantum system S_k , via non-stationary bioresonance interactions with out-of-body farther environment and through decoherence by bodily closer environment. Thus *quantum neural holography* combined with *quantum decoherence* might be very significant element of the *feedback bioinformatics*, from the level of cell – to the level of organism – and further to the level of collective consciousness, with *backward dynamic influence on the expression of genes*. This implies *necessity* of quantum-informational successive *bioresonant balancing* of all unwilling side memory attractors (like ϕ^{k_2} in the Figure), which would cause development of *psychosomatic diseases* on the individual level, and *interpersonal fights* in this and further generations on the collective level.

However, when this process is hindered by **transpersonally entangled blockages** in the energy-state space (on numerous laboratory tests revealing evidence of entangled minds i.e. *extrasensory experiences* in quantum reality, see ref. [127-133]) – then memory attractors of quantum-holographic network of field-related **collective consciousness** should be removed as well (*via prayer or circular psychotherapies* from all relevant meta-positions, to **dis-entangle energy-informationally all mental addresses** included in the problem [6-8,12-19,90-116]). This transpersonal holistic procedure, alongside with working on all levels of acupuncture-based therapies [6-8,12-16,19,20,42-60] & non-circular psycho / energy therapies [6-8,12-16,19,20,71-89], might be **holistic clue** for imposing healing boundary conditions in energy-state space of acupuncture system / (individual & collective) consciousness of patients.

The above quantum-holographic framework might have significant psychosomatic implications on necessity of including **three front lines of integrative medicine** [7,8,12-16,20]: **(1) Spirituality & circular psycho / energy therapies** from all relevant meta-positions, with possibility of permanent erasing of mutual memory attractors on the level of collective consciousness; **(2) Eastern holistic / quantum medicine & non-circular psycho / energy therapies**, whose efforts temporary erase memory attractors on the level of acupuncture system / individual consciousness, and prevent or alleviate their somatization, as a consequence of the indolence on the first level; and **(3) Western non-holistic / conventional medicine**, whose activities on the somatic level via immunology, pharmacology, biomedical diagnostics & surgery hinder or soothe somatized consequences of the carelessness on the first two levels.

The above Hopfield-like quantum-holographic associative neural network (HQHNN) framework implies quantum-holographic feedback influence of EM field of acupuncture system / consciousness on the cellular conformational enzyme(s) changes & expression of genes (so called **macroscopic "downward causation"**), and not only reversed (*microscopic "upward causation"*), with mutual quantum-informational control of ontogenesis / embryogenesis & morphogenesis (via changes in density of enzyme(s) conformational states, within occupational bases of conformational states of corresponding enzyme(s) involved, like in Fig. 1), starting from the first fertilized cell division which initializes differentiation of acupuncture system of (electrical synaptic) "gap-junctions" [6,7,14,15,46-48,60].

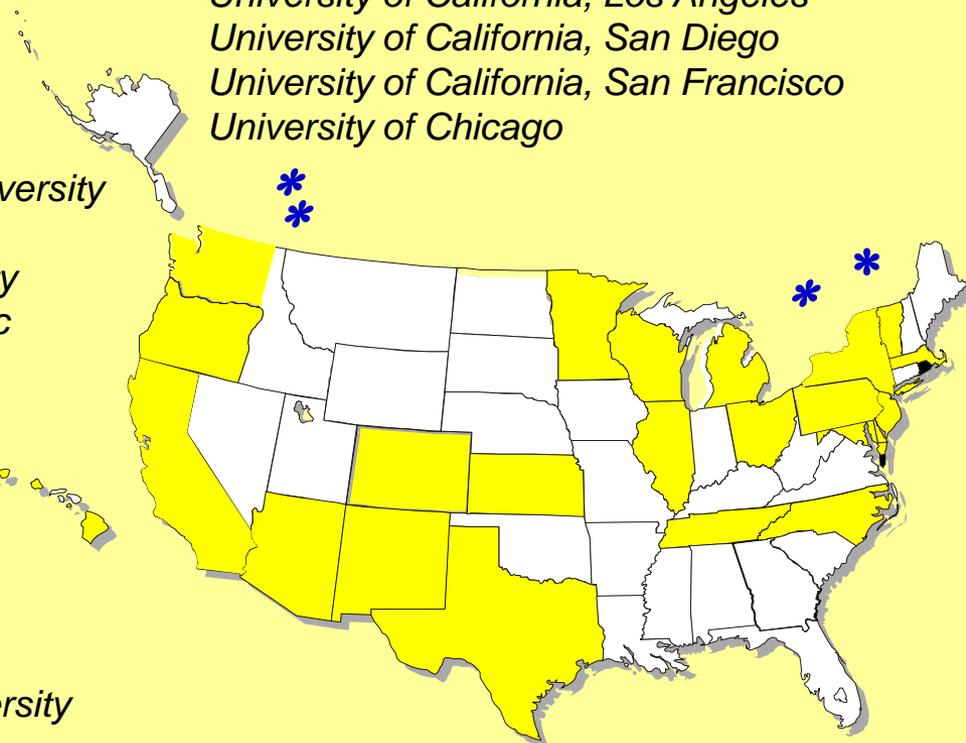
To be more specific, since *all successive biochemical reactions are functionally interconnected*, so are **successive HQHNNs** in bio-informational framework within corresponding enzymes occupational bases – which may be presented in the form of **Haken's multi-level synergetic neural network**, composed of layers of successive HQHNNs. In such bio-informational framework of Haken's multi-level synergetic neural network, *each of the successive HQHNNs layers*, representing corresponding intra-cellular & extra-cellular biochemical reactions, *has a formal Hopfield-like mathematical structure in the form of (non-morphological / abstract) "formal neurons" massively inter-connected by "formal connections"*, while the **layers of HQHNNs** would be mutually **quantum-holographically coupled** via their **"memory attractors"** (i.e. their quantum-holographic memory states, within occupational bases of conformational states of the corresponding enzymes involved) [10].



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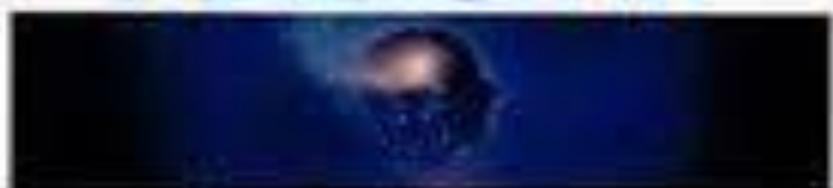
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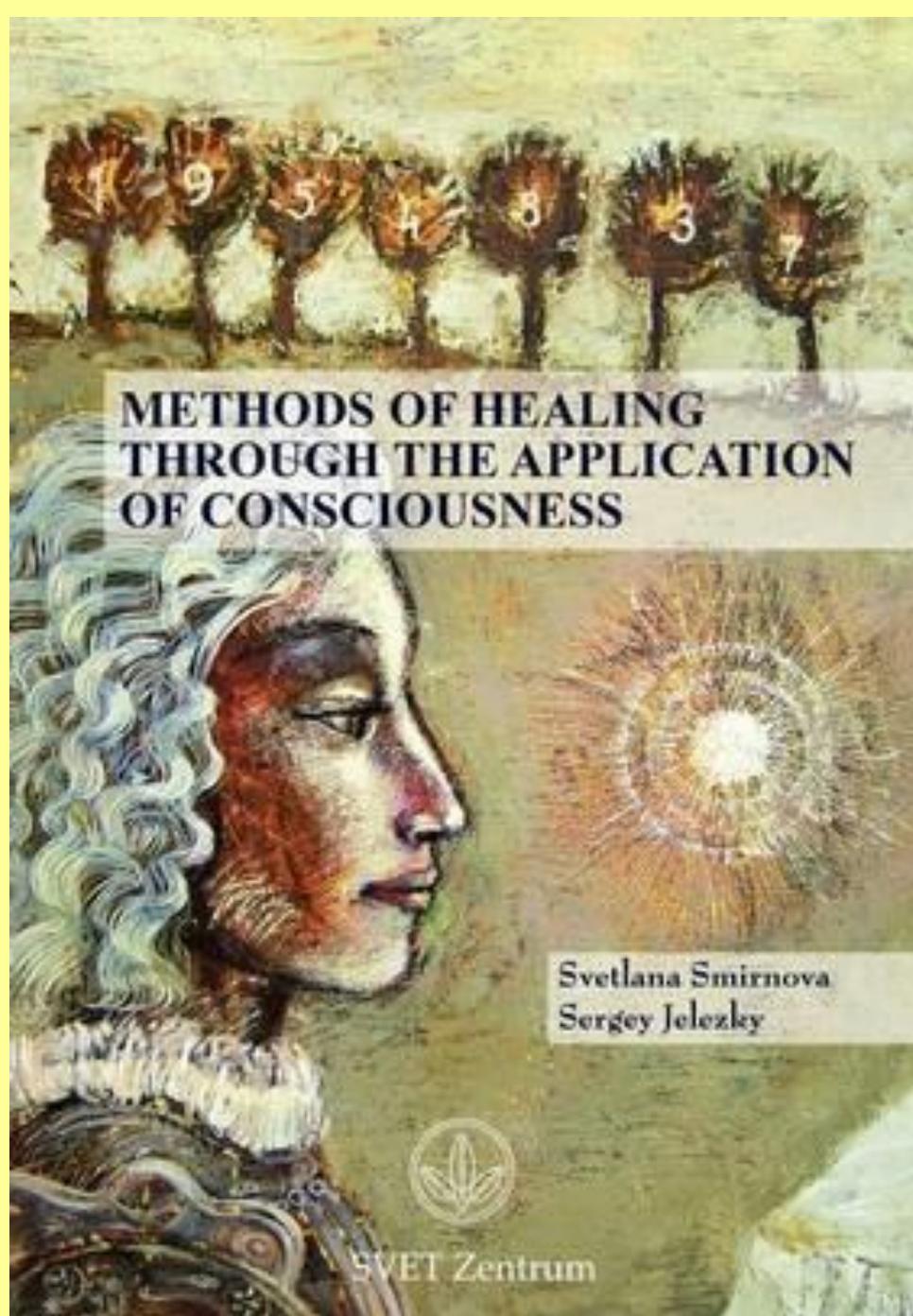
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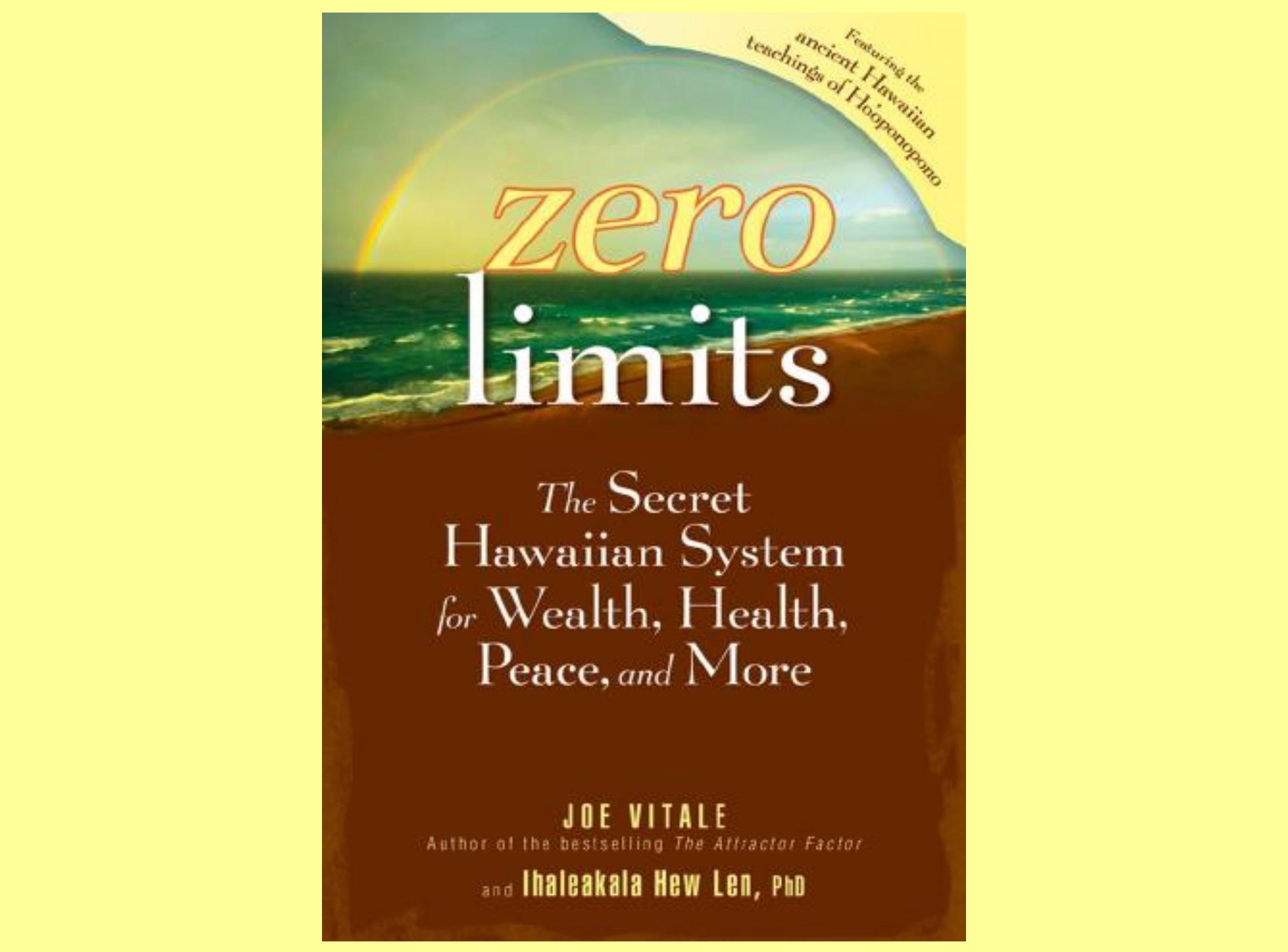
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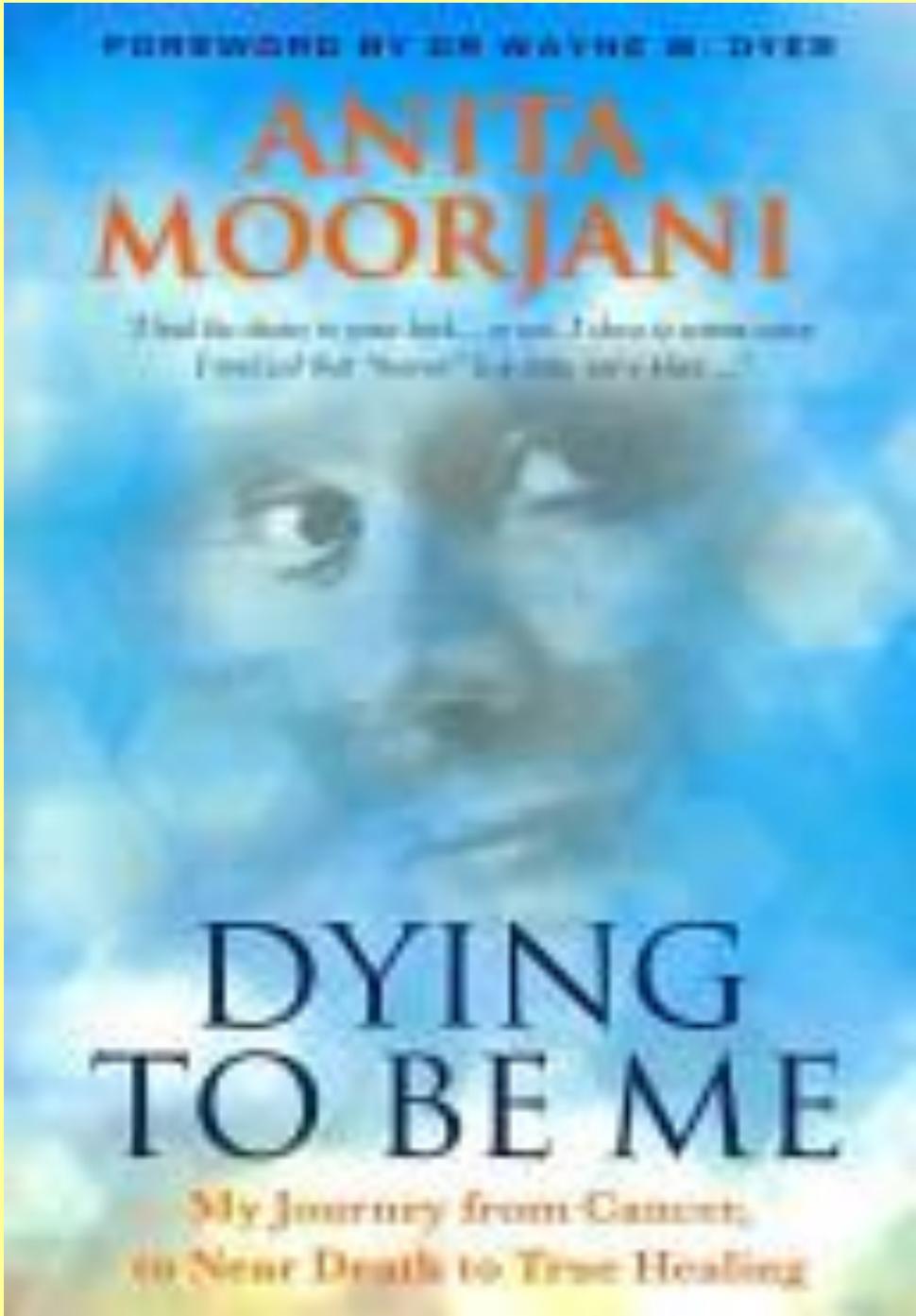
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FOREWORD BY DR WAYNE W. DYER

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*"Read the story to your heart... or soul. I share to your heart
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DYING TO BE ME

*My Journey from Cancer,
to Near Death to True Healing*

ON QUANTUM-HOLOGRAPHIC BASES & FRONTIERS OF INTEGRATIVE MEDICINE & TRANSPERSONAL PSYCHOLOGY: EPISTEMOLOGICAL & SPIRITUAL IMPLICATIONS

Our *macroscopic quantum-informational Hopfield-like holographic framework for psychosomatics* also implies that **quantum-holographic hierarchical parts carry information about the whole** (which resembles Hindu relationship **Brahman & Atman**, as a whole & the part which contains information about the whole [96-98]), allowing **subtle quantum-informational coupling of hierarchical levels in Nature** [123-127,146,147].

This is supported by **acupuncture system & its projection zones** (*ECIWO holographic concept* [54]), **quantum-holographic influence on expression of cell's genome** (by *linguistic-wave-genetic-modulation of irradiating-laser beams* [64]), **transpersonal origin of amazing creativities** (*Tesla & Mozart as case studies* [148,149]) & **predestinated life paths & temptations** (*experiences of hypno-regressions* [110] & *tribal traditions* [91-95] & *traditions of East* [96-100] & *West* [101-104], while still emphasizing that it is possible to **reprogram / optimize them by spiritual purification** [87-117]).

In this context, despite the **(unitary) deterministic evolution** of quantum-informational Hopfield-like holographic neural network of **collective consciousness** (as there is no out-of-cosmic environment that triggers (non-unitary) collapse of quantum-coherent state of field-related cosmic collective consciousness & the complement particle-related cosmic environment) [7-9, 12-19] – *memory attractors of collective consciousness could still be **prayer-reprogrammed*** – probably **via prayer-excited new macro-quantum energy-informational portions of vital energy / uncreated light** in prayer-related persons (similarly to *mentally-channeled prana / qi / ki* in local & trans-personal healing in Ayurvedic / Qigong / Reiki practices [77,78,79,80,87,88]), as **dis-entangling** energy-informational **in-deterministic intervention** in quantum-holographic evolution of collective consciousness (and incoming individual & collective events), thus **(non-unitary) setting new boundary conditions**) [7-9,12-19].

This leaves most room for **free will & influence on future preferences** – implying **indispensable role of individuals** due to their influence & care for **collective mental environment**.

Bearing also in mind **possibility & effectiveness of transpersonal circular meridian (psycho / energy) therapeutic processes**, i.e. from all relevant mentally-addressed meta-positions of other persons who participate in treated trauma [72], this implies that all these interactions of trauma-related persons are of **quantum-gravitational nature**, via **miniature “wormhole” space-time tunnels** (generated in accordance with very general Einstein’s *Principle of equivalence* of inertial & gravitational accelerations [150]) in **highly-non-inertial transitional states of consciousness** of trauma-related persons [6-9, 11-17,19] (i.e. “silver cords” of vital energy, extrasensory observable in altered states of consciousness between heart, stomach or throat chakras of related persons; in Afro-Haitian voodoo tradition “silver cord” between operator & victim is deliberately created by visualization, while in Hawaiian ho’oponopono tradition “silver cord” is cut by visualization in order to remove traumatic emotional connection – which otherwise naturally exists between mother & child, and is spontaneously formed by intense exchange of vital energy among relatives, close associates, current & former lovers, friends & enemies, whereby it can also survive *post mortem* between the living & the deceased [7,12-17]).

Thus, our theoretical considerations suggest **real nature of transpersonal experiences** of spiritual traditions [41,55,76,117-119,137], substantiated by **accumulated phenomenological evidences & laboratory & clinical studies** [2,4,37,64,72,115,116,127-136,138-143,148-150] & **practically incorporated acupuncture-based & consciousness-based holistic methods of quantum-informational medicine** [7,12-16,87-114].

In above quantum-holographic context, association of individual consciousness to manifestly-macroscopic-quantum acupuncture system, and application of theoretical methods of associative neural networks & quantum neural holography & quantum decoherence theory, imply **two cognitive modes of knowledge**, according to coupling strength consciousness-body-environment [12-19]: **(i) weakly-coupled quantum-coherent direct one** (in out-of-body religious / creative transitional & altered states of consciousness, like prayer, meditation, creative dozes, lucid dreams...), & **(ii) strongly-coupled classically-reduced indirect one** (in bodily perceptively / rationally mediated normal states of consciousness, like sensory perception, logical and scientific thinking...) – *with conditions for mutual transformations* – and *significant spiritual & epistemological implications related to regained strong coupling of quantum-holographic contents of consciousness with bodily-environment, classically-reducing directly obtained quantum-coherent content.*

So, **science is closing the circle**, *re-discovering two modes of knowledge & imposing its own epistemological limitations* [8,9,12-19] – as preserved for millennia in **numerous spiritual traditions** [92-101].

It should be pointed out that *fundamentally-theoretical reasons* for **out-of-body displacement of consciousness** lay in necessity that consciousness must have, at least in (quantum-coherent) altered / transitional states, **sufficiently isolated relevant macroscopic quantum degrees of freedom** [9,12-19] – *in order to have in-deterministic characteristics of free will* – otherwise not possible in strong body's environment which causes quick quantum decoherence of consciousness into (classically-reduced) normal state [34].

According to our previous proposal [9,12-19], **transpersonal interactions** (as a **model of transpersonal nature of creativity**, i.e. combination of two modes of cognition: **Tesla and Mozart**, as case studies!) might be interpreted by **collapse-related** consciousness-channeled quantum-gravitational tunneling of individual consciousness – mentally addressed on the target's content of the collective consciousness in (short-lasting) **transitional states of consciousness** – thus **intentionally channeling state** of individual consciousness, $|\Phi\rangle_S \rightarrow |\Phi_j\rangle_S$, and automatically influencing the complement collective consciousness output $|\Psi\rangle_E \rightarrow |\Psi_j\rangle_E$ in quantum-gravitationally-induced & consciousness-channeled collapse:

$$|\Phi\rangle_S |\Psi\rangle_E \rightarrow \sum_i c_i |\Phi_i\rangle_S |\Psi_i\rangle_E \xrightarrow{p_j = |c_j|^2 \approx 1} |\Phi_j\rangle_S |\Psi_j\rangle_E$$

The above relation might be quantum-informationally interpreted as **two-step decoherence process: (1) quantum entanglement of memory attractors** of interacting individual consciousness $|\Phi_i\rangle_S$ & collective consciousness $|\Psi_i\rangle_E$ (correlated via **(consciousness-based) resonant recognition / interaction** of associatively-related attractors of individual & collective consciousness), and **(2) body-induced collapse** with quasi-stochastic **mentally enhanced $|c_j| \approx 1$ contribution** by focusing on corresponding j -th memory attractor in normal state of individual consciousness [with notification of "gauge quantum field theory & quantum gravity correspondence (in string theory)" of any quantum entangled system (i.e. Einstein-Podolsky-Rosen correlated quantum pair) & corresponding connected miniature (non-traversable) "wormhole" (i.e. quantum-gravitational Einstein-Rosen bridge) [154]; (on its possible traversability in cosmological conditions see ref. [152], while in transpersonal conditions see refs. [9,12-19])].

**QUANTUM-INFORMATIONAL MEDICINE QIM 2011
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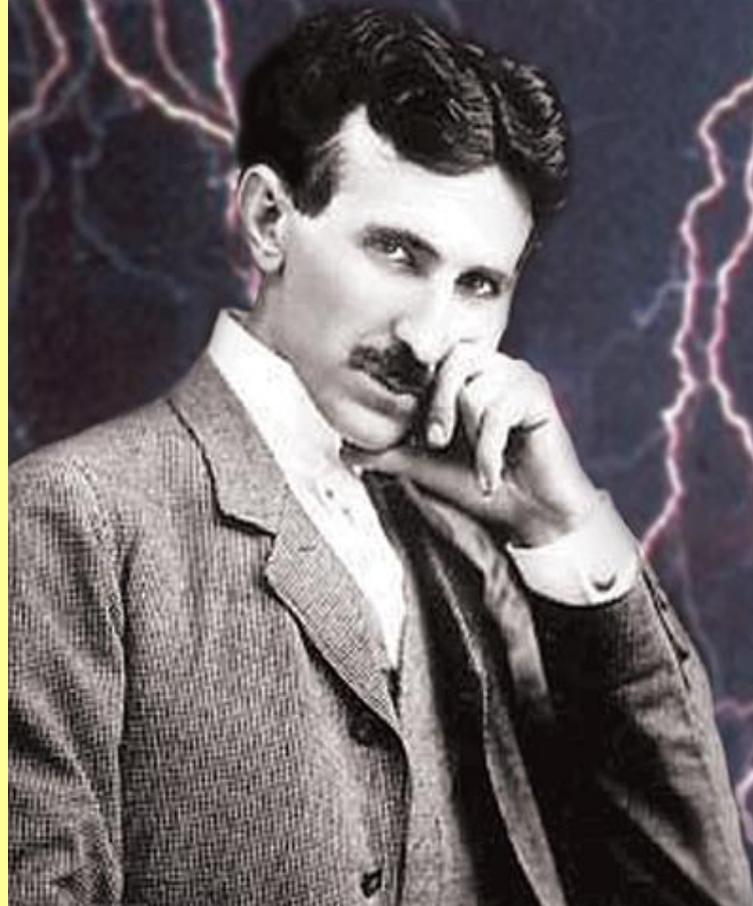
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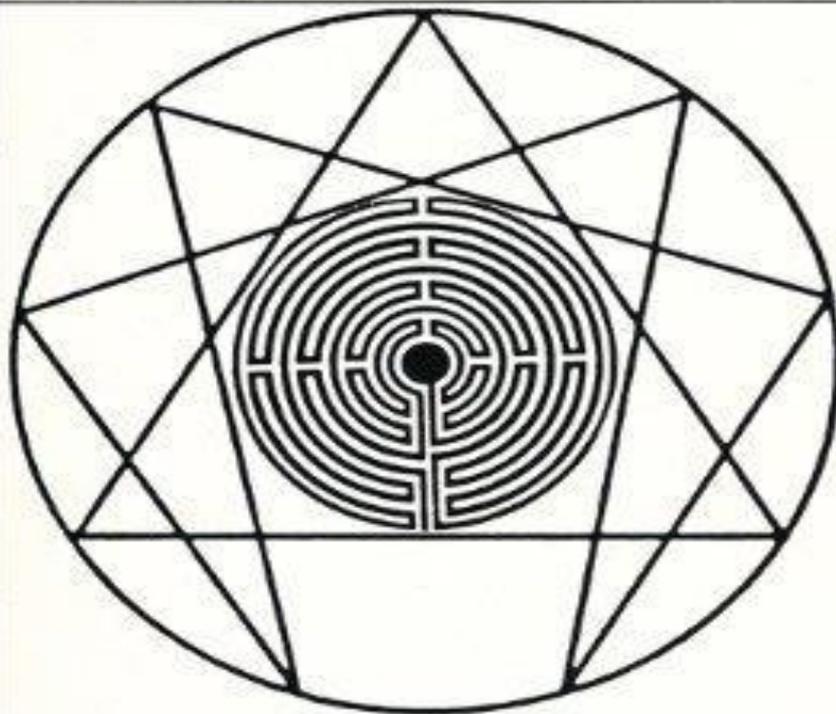
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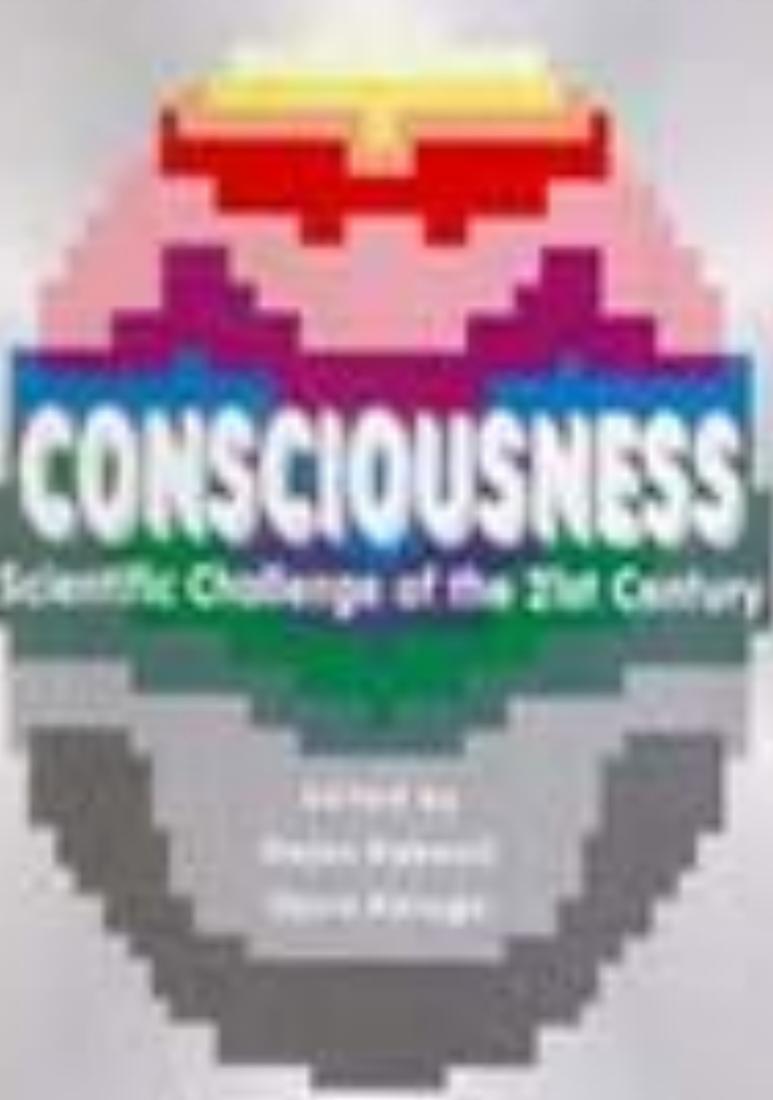
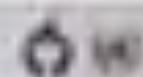


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ON WIDER PSYCHOSOMATIC, EPISTEMOLOGICAL & SPIRITUAL IMPLICATIONS AND CONCLUSIONS

From rational-empirical viewpoint, this paper includes all ***three essential aspects*** that must be in the focus of any ***comparative study of science & spirituality***:

(A) utility of psychosomatic & spiritual practices of tribal traditions, traditions of the East, and traditions of the West, in healing or the salvation of souls;

(B) epistemology & two modes of knowledge, direct-mystical and indirect-rational; and

(C) phenomenology of transpersonal communications, mystical, near-death, out-of-body, and extrasensory experiences.

(A) Utility of psychosomatic & spiritual practices. Our quantum-holographic framework of integrative medicine & transpersonal psychology provides deeper understanding of **holistic nature** of psychosomatic diseases & limitations of their prevention & healing, as **acupuncture-based & consciousness-based quantum-informational therapies**, by imposing **new healing boundary conditions** in the energy-state space of EM quantum-field-related acupuncture system / (individual & collective) consciousness – suggesting **three front lines of psychosomatic integrative medicine** [7,8,12-16,20]:

(i) spirituality & circular (psycho / energy) therapies, from all relevant meta-positions, with possibility of potential permanent removal of mutual memory attractors on the level of collective consciousness;

(ii) (quantum) holistic medicine & non-circular (psycho / energy) therapies, which temporarily remove memory attractors on the level of acupuncture system / individual consciousness and prevent or alleviate their somatization, as a result of negligence on the first level;

(iii) symptomatic conventional medicine, which via immunology, pharmacology, biomedical diagnostics and surgery at the physical level prevents or alleviates somatic consequences of carelessness on the first two levels.

It should be noted that *necessary activities in second & third levels, **with neglect of the first level**, would result in **further transfer of memory attractors** on the level of individual & collective consciousness in this & future generations, thus **accumulating quantum-holographic nonlocal loads** that cause then not only diseases but also interpersonal conflicts, wars and other sufferings!* Thus **civilization**, via **synthesis** of scientific knowledge in the field of consciousness & millennia experiences of *spiritual traditions*, could contribute that **new millennium** would be characterized by **wisdom** [16,23-26].

Decisive role in this process could play **all religious communities, cultivating** a true **spiritual moral** (not declarative, as so far in history) & absolute inter-personal, inter-ethnic & inter-religious **tolerance**, as a measure of individual behavior from the **perspective of death**, i.e. amount of generated & non-reprogrammed psychosomatic conflicts until death, which determines **spiritual evolution** of the soul of the deceased and **preferences** of individual and / or collective future of the descendants – that can be **significantly altered** only via **collective prayer** for our neighbors & enemies, and consequently **global reprogramming of collective consciousness**.

(B) Epistemology & two modes of knowledge. Our quantum-holographic framework of integrative medicine & transpersonal psychology also provides better understanding of **two modes of knowledge**, according to coupling strength mind-body-environment [12-19]:

(i) weakly-coupled quantum-coherent spiritual / creative direct mode (in altered & transitional states of consciousness), and

(ii) strongly-coupled classically-reduced perceptual / rational indirect mode (in normal states of consciousness)

– and conditions of mutual transformation, with significant **epistemological / spiritual implications**.

This explains **generally poor informational rationalization** of direct quantum-holographic spiritual / religious **mystical experience** (as a problem of quantum theory of measurement, related to **reduction of implicate order** of quantum-coherent (quantum-holographic) superposition of states **into explicate order** of measuring classically-reduced states) [12-19].

And can help us realize that **all our partial rationalizations** (classically-reduced mappings!) are still **only approximation of fundamentally-holistic reality** (quantum-holographic territory!) – and that **all divisions are tragic misunderstanding** of spiritually immature (historical) epoch of civilization (because, map is not the territory!) [16,23-26].

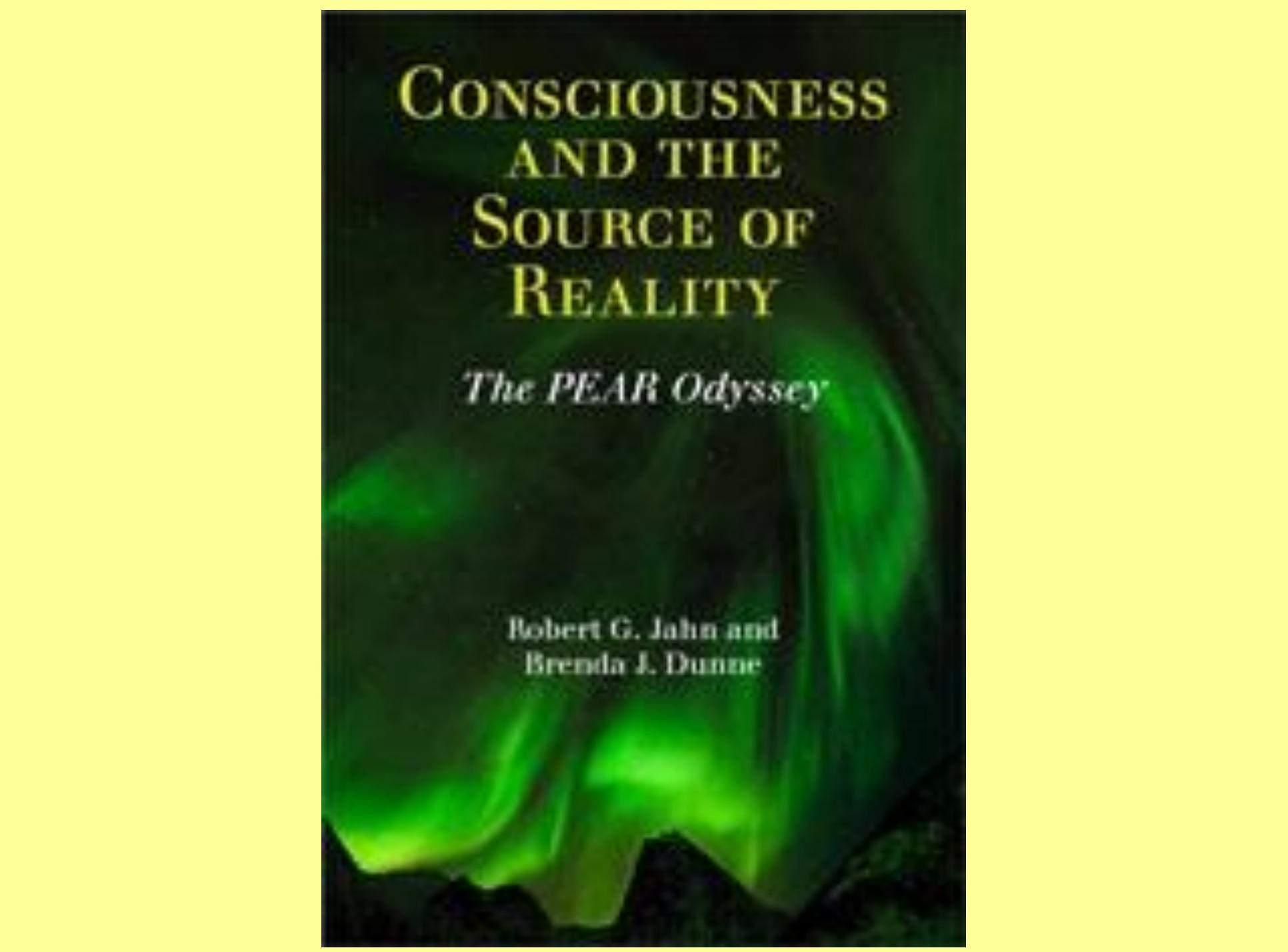
So science is closing the circle, by **re-discovering two modes of knowledge & imposing its own epistemological limitations** – as preserved for millennia in *shamanistic tribal traditions* [92-95], or as concisely described by *Patanjali in Yoga Sutras* more than two millennia ago [96-98], pointing out that mystical experience (samadhi) is “filled with truth” and is “above inference and scriptures”, or as formulated at the beginning of last century by *Berdyayev in Philosophy of Freedom* as difference of two modes of knowledge [101], prayer-mediated “comprehension of the affairs invisible” & rationally-mediated “comprehension of the affairs visible”!

This is in line with *scientific re-awakened interest in the phenomenon of consciousness*, with indications of appearance of **grand synthesis of two modes of knowledge** – where **each individual becomes indispensable due to influence & care for collective mental environment & social well-being**, which is **fundamental issue of both spiritual & civil morality** [16,23-26].

(C) Phenomenology of transpersonal communications. Our quantum-holographic framework of integrative medicine & transpersonal psychology also suggests **real nature of transpersonal experiences** of spiritual traditions [41,55,76,117-119,137], substantiated by **accumulated phenomenological evidences & laboratory & clinical studies** [2,4,37,64,72,115,116,127-136, 138-143,148-150] & **practically incorporated in acupuncture-based & consciousness-based quantum-informational medicine** [7,12-16,87-114].

In these lines, *transpersonal experiences could be of **quantum-gravitational nature** in space-time transcending highly-non-inertial **transitional states of consciousness** [8,9,12-17,19] (from high-dielectric bodily into low-dielectric out-of-body states!) locally equivalent-to-strong-gravitation (according to very general Einstein's **Principle of equivalence** of inertial & gravitational accelerations!) manifested by **locally generated "wormhole" space-time tunnels** (stabilized by so called **exotic matter** (vacuum fluctuations in strongly curved space-time of "wormhole" tunnels [152]) with **anti-gravity effects** (indeed observed in transpersonal **psychokinetic manifestations of vital energy** [13,76,96,99,100,126,131,150]!)).*

Then **transpersonally-extended esoteric concepts** of spiritual traditions of East & West could be biophysically accounted within our plausibly generalized **quantum-holographic / quantum-gravitational framework** [8,9,12-17,19]: **(i) astral body** (*manomaya, linga-sarira, manovijnana, ka, psyche, nephesh, nafs, subtle body, psychic body, soul...*) [96, 97,102,118] **vs. ionic component of EM-ionic macro-quantum acu-system displaceable out-of-body** (connected with the body by miniature 'wormhole' space-time tunnel, generated in highly-non-inertial transitional states of consciousness, as reported in extrasensory near-death experiences) [6-9,12-17,19]; **(ii) mental body** (*vijnanamaya, suksmasarira, manas, ba, thymos, ruach, ruh, noetic body, spiritual body, mind...*) [96,97, 102,118] **vs. EM component of EM-ionic macro-quantum acu-system displaceable out-of-body** (embedded within ionic component of acu-system) [6-9,12-17,19]; **(iii) distributed centers of consciousness** (*chakras, acupuncture points, sephiroths, holy discs...*) [96,97,102,118,119] **vs. EM-ionic condensates of EM-ionic macro-quantum acu-system displaceable out-of-body** [6-9,12-17,19]; **(iv) vital energy** (*chi / qi / ki, prana / akasha, mana, ka, pneuma / ether / natura medica / anima mundi, yesod, baraka, the Holy Spirit / Uncreated Light, bioenergy / biofield...*) [96,97,102,118,119] **vs. EM-ionic-exotic condensates within EM-ionic macro-quantum acu-channels displaceable out-of-body** (*unstructured / structured, virtual / real* [8,69], with possible generalization from the EM field to the unified field, in line with the broader traditional meaning of vital energy, as all-pervasive cosmic quintessence [6-9,12-17,19,119]). Additionally, if put in theoretical context of **holographic principle** [151], according to which any 3D physical system is *isomorphic* to holographic information embedded on its 2D surface, then **quantum-holographic informational content of a body** could also be contained in **corresponding surface layer of vital energy of astral-mental body (aura)**, as stated in spiritual traditions of East & West [96,97,102,118,119].



CONSCIOUSNESS
AND THE
SOURCE OF
REALITY

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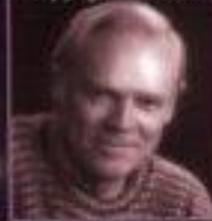
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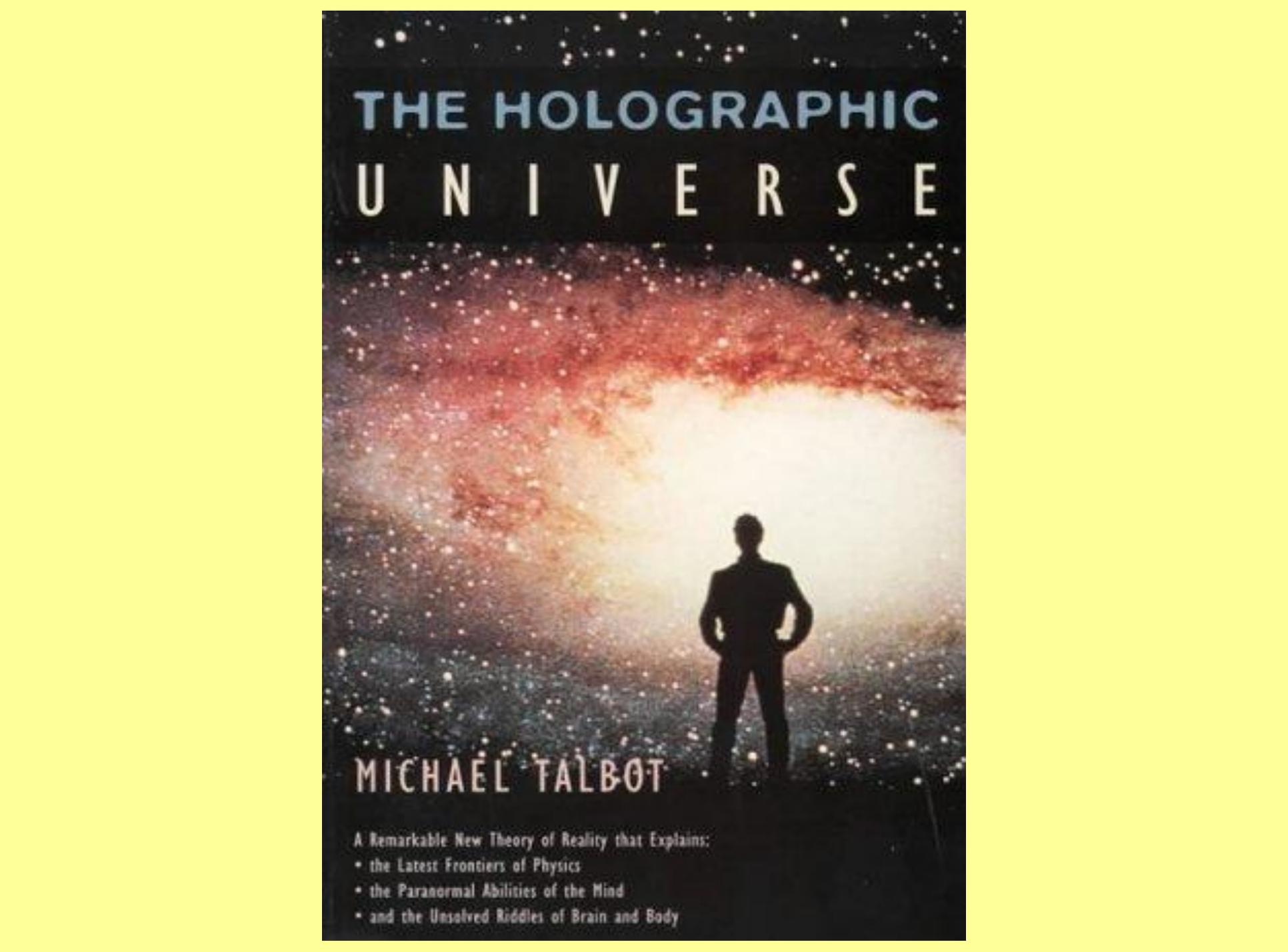
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Michael Talbot is author of numerous books that illuminate parallels between ancient mysticism & quantum theory. In his book *The Holographic Universe*, published in 1991, shortly before his untimely death, Talbot relies on the work of famous scientists, quantum physicist *David Bohm* & neurophysiologist *Karl Pribram*, indicating that **Universe** could be a **giant hologram**, type of **construct of mind on subject / object borderline** – relativizing question of whether there is objective reality or it is **constantly fluctuating** between **implicate & explicate order**!?

In his book *The Holographic Universe* [126] Talbot (himself a psychic!) argues that many in the book well documented **mysterious phenomena**:

synchronicity & lucid dreams & eidetic images & multiple personalities, aura vision and therapy & visualizing, hypnotic and miraculous healings, mystical religious experiences & out-of-body and near-death experiences, psychometrics & precognition & extrasensory perception, psychokinesis & materialization & teleportation,

could be explained in the framework of (*quantum*) **holographic paradigm**.

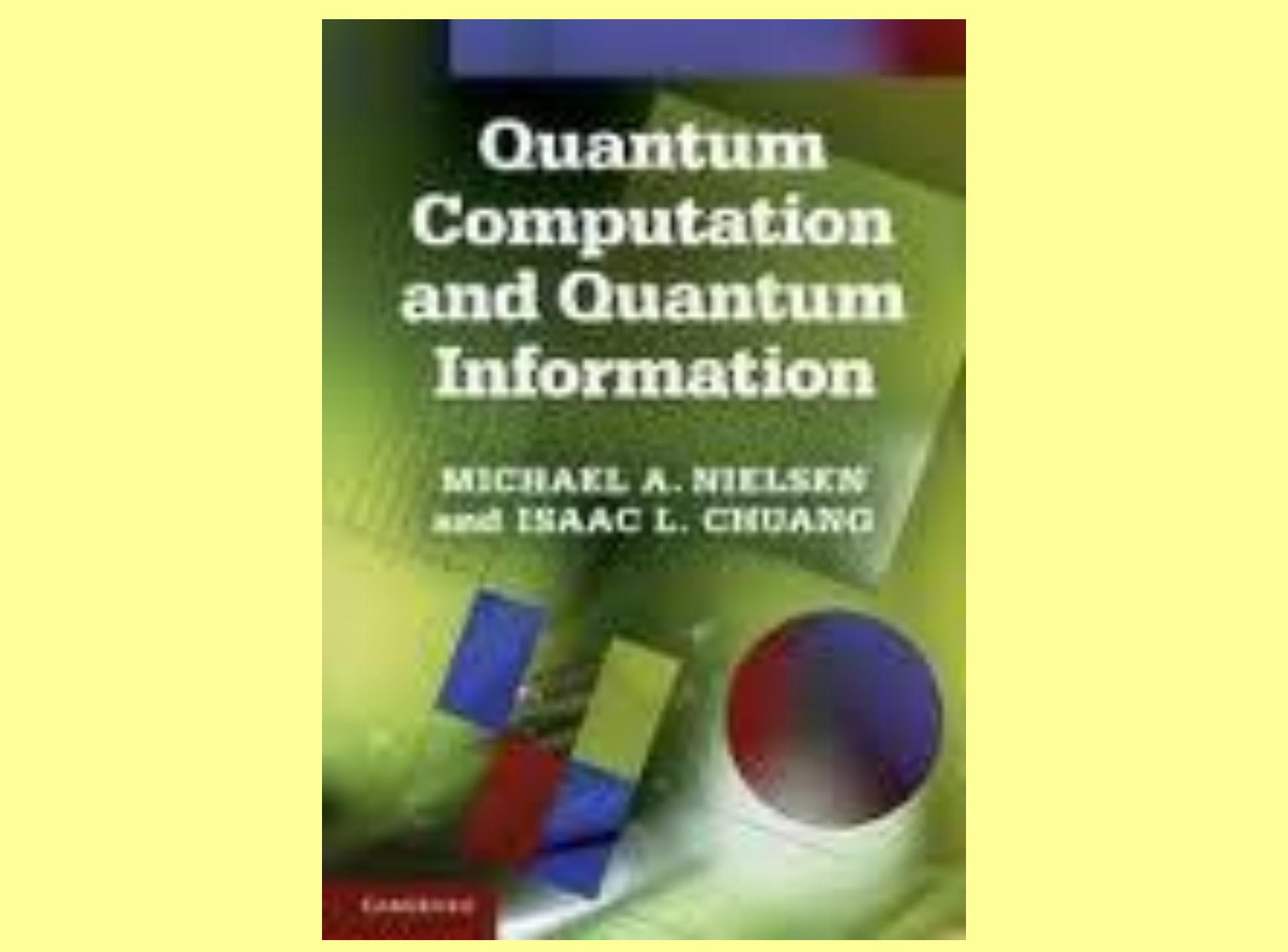
CONCLUSION

*Everything considered & discussed above might be of fundamental importance in understanding underlying **macroscopic quantum-informational Hopfield-like holographic** (acupuncture system / (individual & collective) consciousness) **EM field-related biofeedback control mechanisms** of embryogenesis / ontogenesis & morphogenesis via **downward influence on expression of genes** [7,8,12-16,20,144,145] – shedding new light on long standing open problems of **acupuncture system & consciousness** as well.*

*It also indicates the **full significance of holistic education & behavior** – demonstrating ultimate necessity of **redefining global educational / informational / political goals**, with shift towards **holistic gentle actions for global solutions of the world risk society** [23-26]!*

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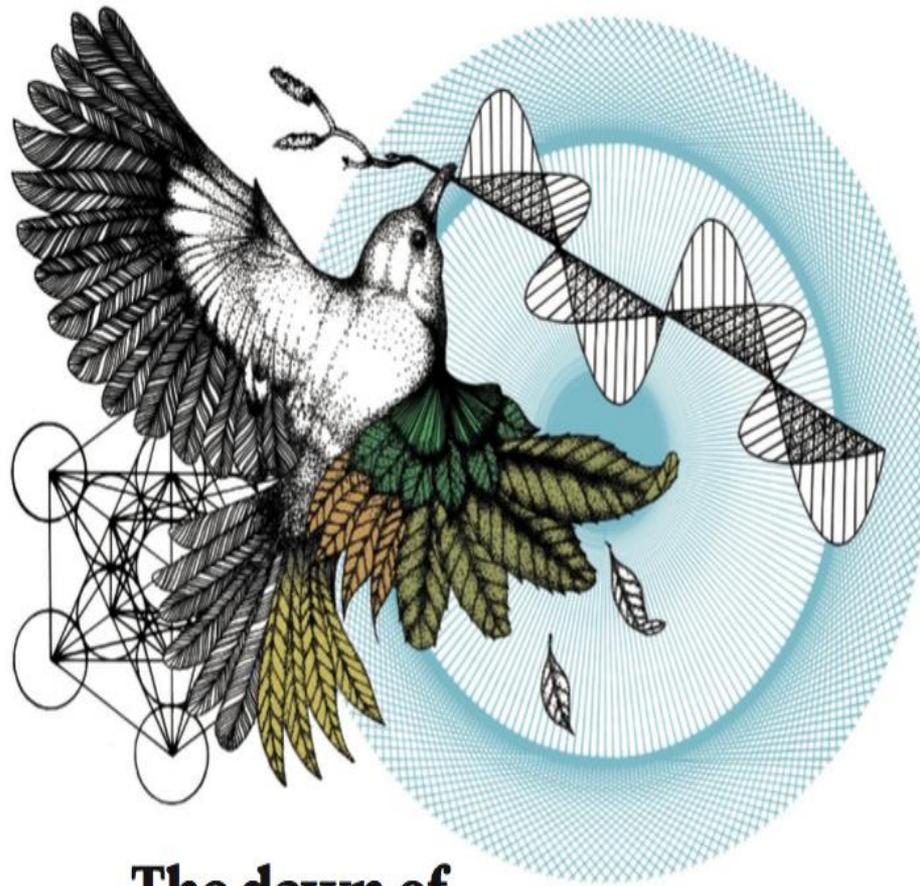
QUANTNUM-INFORMATIONAL TRENDS



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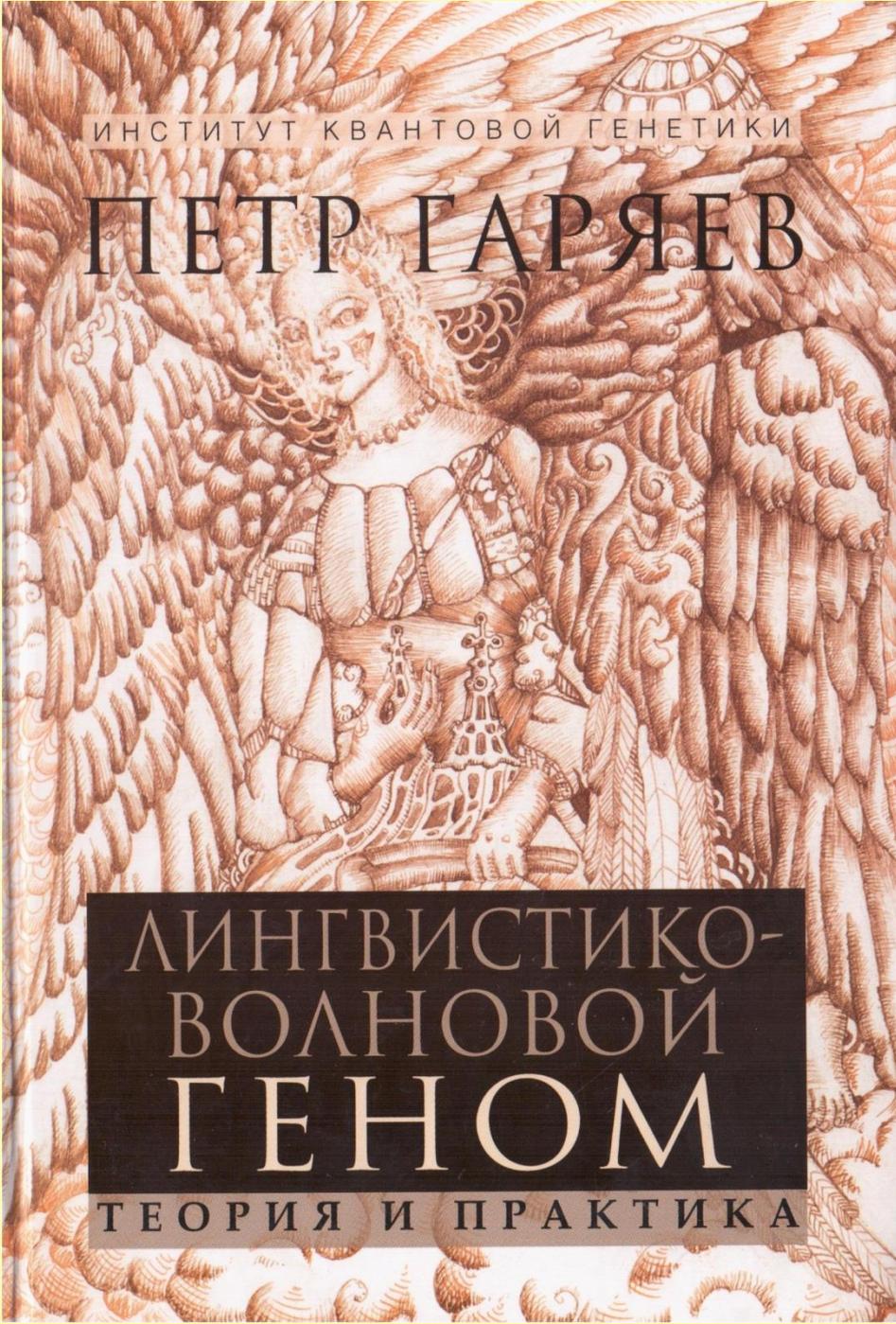
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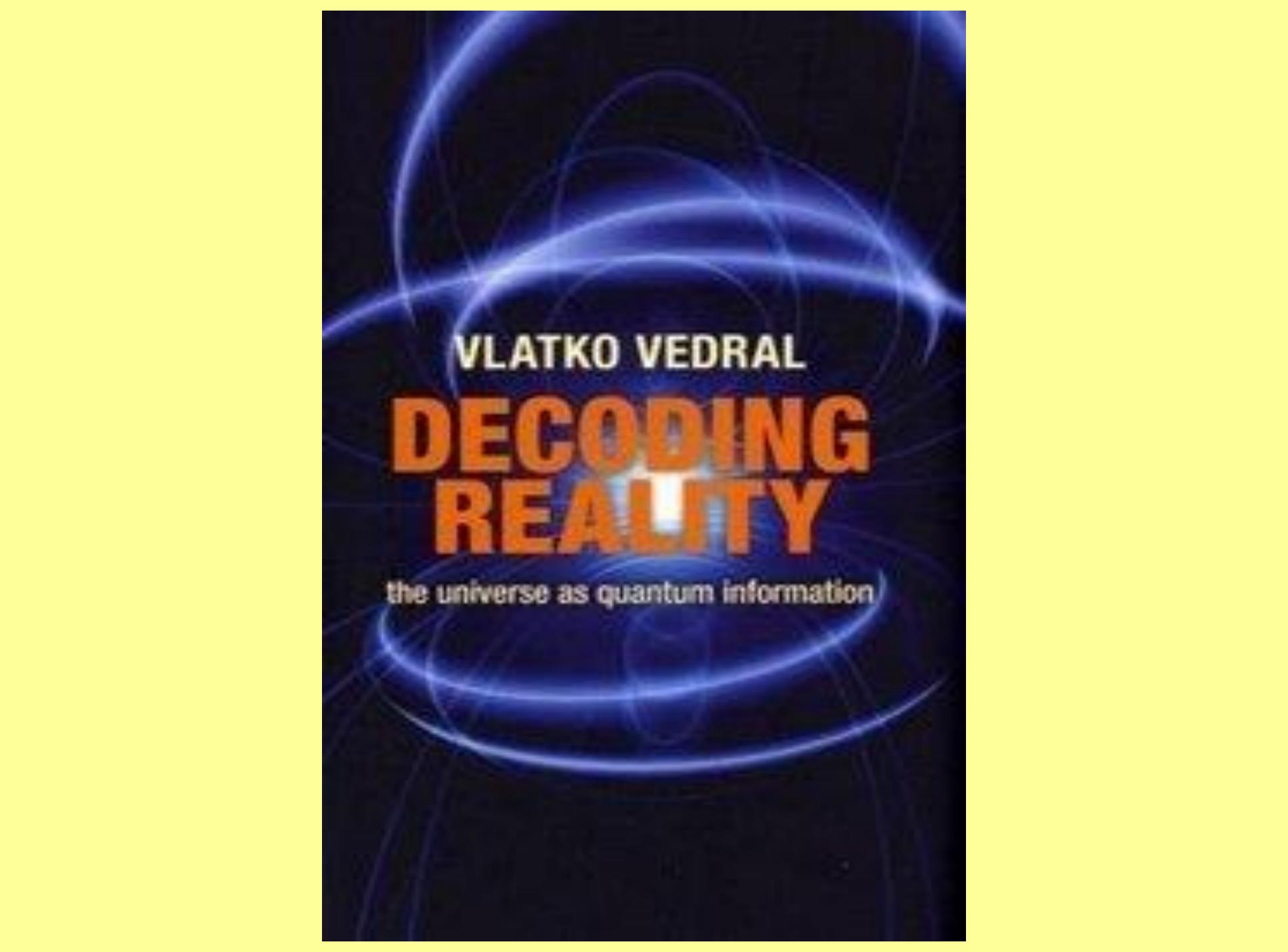
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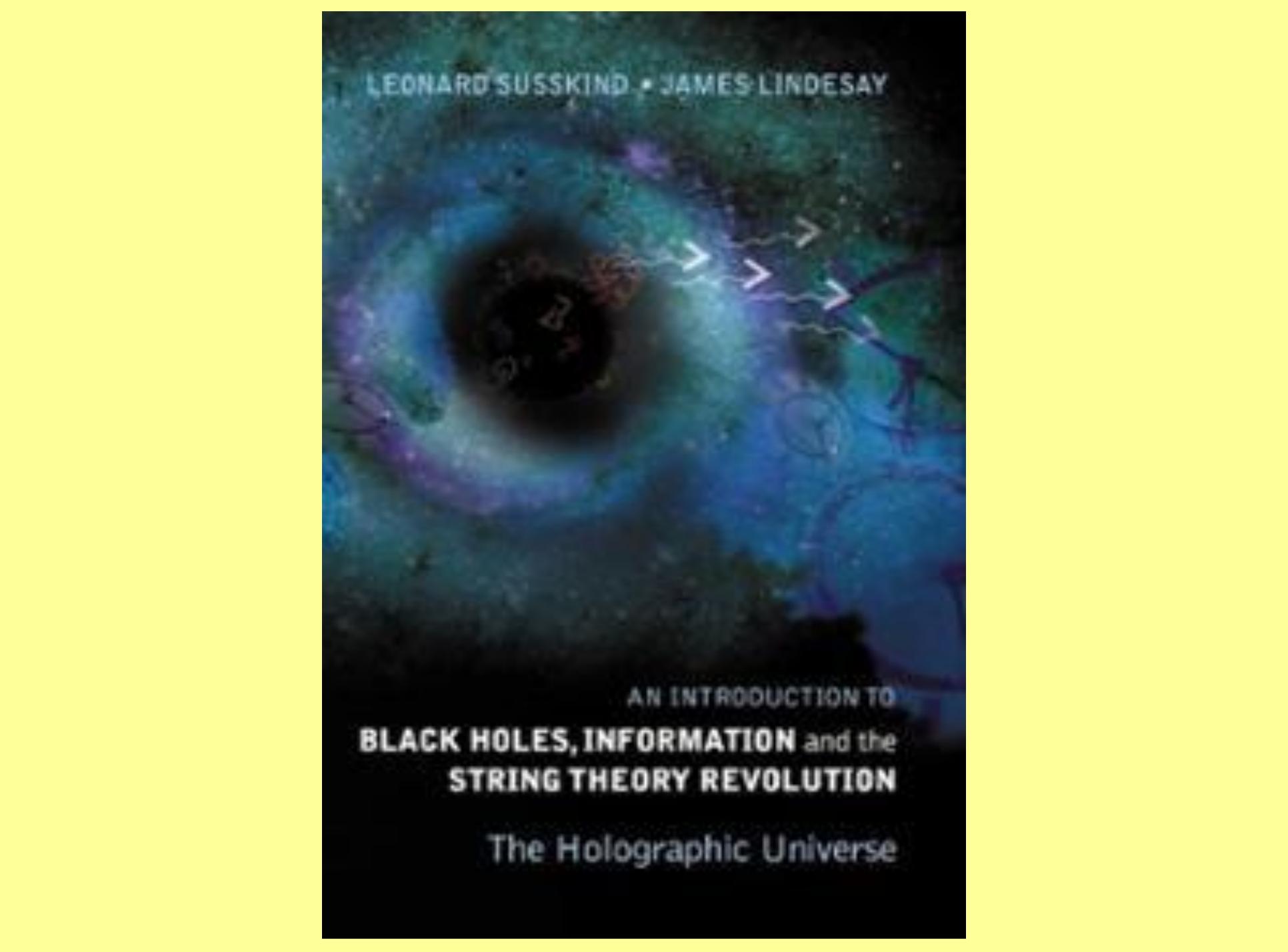
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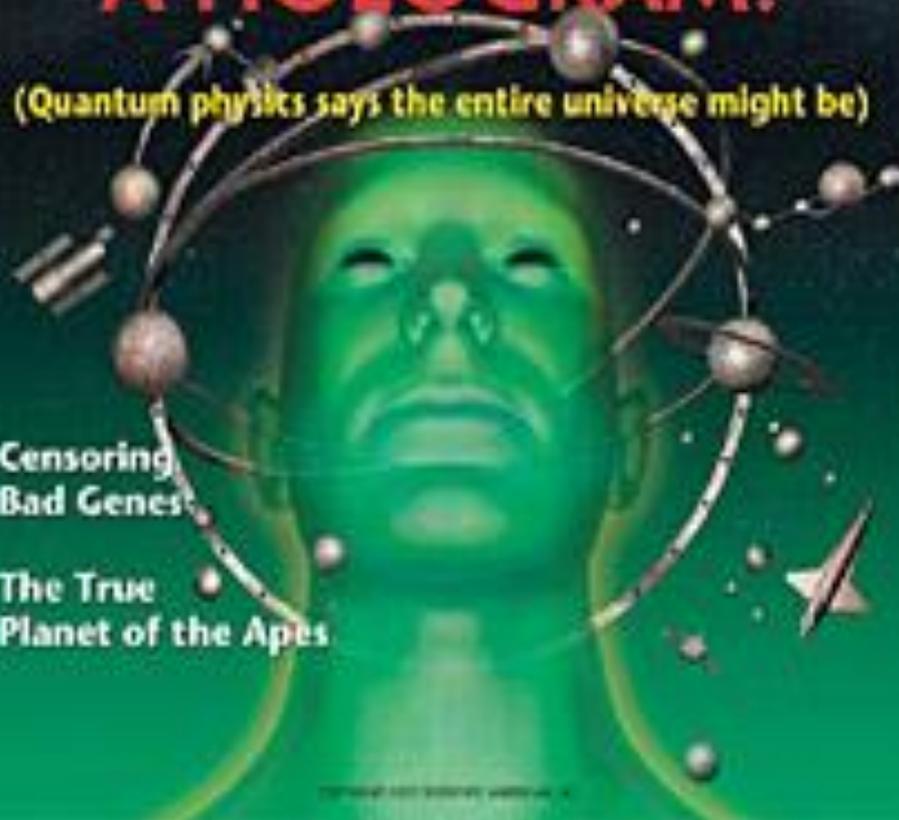
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ARE YOU A HOLOGRAM?

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Censoring
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Author is dealing with the research and educational work in the fields of integrative biophysics, quantum medicine and quantum-holographic informatics for many years, and as a connoisseur of classical and quantum physics explains biophysical phenomena and provide arguments for the application of integrative biophysical diagnostic and therapeutic methods and techniques in medicine.

Bearing in mind that contemporary research indicates the increasing presence of psychosomatic factors in the origin of many diseases, then the inclusion of psychological phenomena (consciousness, stress, etc.) oriented to the treatment of man as a whole and not of diseases as symptoms, represents a shift in the diagnosis and treatment of human health, in respect to the classical medicine. The book also makes a shift in the field of traditional medicine, as it provides a satisfactory explanation for the application of some traditional methods and techniques...

The monograph is of the multidisciplinary character and is primarily dedicated to open-minded physicians who practice classical and traditional medicine, to specialists and students of the postgraduate studies in biophysics and biomedical engineering, as well as to all those interested in the application of new scientific methods and techniques in medicine...

– Djuro Koruga

According to the structure and contents, the book can be equally classified into a higher educational textbook, but also into a very advanced and specific (by issue and research approach) multidisciplinary (physics, biology, medicine, philosophy) scientific monograph.

The book offers a broader and deeper information about hot development of the biophysics of consciousness at the end of the 20th century and the beginning of the 21st century, which is not only of fundamental importance, but allows a wide implementation, from the genetic to biomedical engineering. In order to understand physics of living nature the whole tool of modern theoretical physics is used, in all levels: from molecular, via cellular and over-cellular, to bodily level, including the biosphere as a whole. Therefore, to help readers the appendices on quantum mechanics, quantum chemistry, and quantum informatics are added.

Generally speaking, before the readers is a unique book-monograph...

– Jovan Šetrajčić



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Dejan Raković

INTEGRATIVE BIOPHYSICS, QUANTUM MEDICINE AND QUANTUM-HOLOGRAPHIC INFORMATICS:
PSYCHOSOMATIC-COGNITIVE IMPLICATIONS

Dejan Raković

INTEGRATIVE BIOPHYSICS, QUANTUM MEDICINE AND QUANTUM-HOLOGRAPHIC INFORMATICS: PSYCHOSOMATIC-COGNITIVE IMPLICATIONS

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QUANTUM-INFORMATIONAL BIOMEDICINE & QUANTUM INFORMATICS: RELATIONSHIPS & PERSPECTIVES

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UNIVERSALITY OF QUANTUM MECHANICS, BORDERS OF QUANTUM LIMIT,
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PHYSICAL NATURE OF QUANTUM COLLAPSE)

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TRANSPERSONAL INTERACTIONS & SPATIO-TEMPORAL QUANTUM ENTANGLEMENT IN
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BODY)

**THANK YOU
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150. It should be emphasized that many *transpersonal phenomena* related to *consciousness and psychosomatic bioenergy-correction* are phenomenologically well documented, and that their physical explanation should be sought on the very border of the current *scientific paradigm*; in the framework of our plausibly generalized *quantum-holographic / quantum-gravitational theoretical framework of consciousness and psychosomatics* they are of *quantum-gravitational nature in the space-time transcending highly-non-inertial transitional states of consciousness* [8,9,12-17,19] (*from high-dielectric bodily into low-dielectric out-of-body states!*) equivalent-to-strong-gravitation (*according to very general Einstein's Principle of equivalence of inertial and gravitational accelerations!*) manifested by locally generated "wormhole" space-time tunnels (stabilized by so called *exotic matter* (vacuum fluctuations in strongly curved space-time of "wormhole" tunnels [152]) with *anti-gravity effects* – indeed observed in *transpersonal psychokinetic manifestations of vital energy* [13,76,96,99,100,126,131], http://www.youtube.com/watch?v=faUJAgvvV_c). The same theoretical framework also suggests a physical basis for ad hoc *von Neumann's projection postulate* (on micro-quantum scale), to explain the quantum-mechanical *wave function collapse* (via local quantum-gravitationally-induced "wormhole" tunnels in highly-non-inertial quantum-measurement-like situations equivalent-to-strong-gravitation (in accordance with Einstein's *Principle of equivalence!*); the question of how it is possible that these highly-non-inertial microparticle processes with inevitable opening of miniature "wormhole" tunnels were not taken into account within quantum mechanics which is nevertheless extremely accurate theory(!) – can be answered as they were(!) but *implicitly* in the framework of von Neumann's projection postulate (which is on the deeper quantum-gravitational-level!?) [8,9,12-17,19]; on the other hand their macroscopically accumulated anti-gravitational imprint might possibly be observable on cosmological scale (or have been already detected(!) by recent advances in the cosmological tests, which invite again Einstein's cosmological constant and related concept of hypothetical dark energy or quintessence which permeates all of space and tends to accelerate the expansion of the universe [153]; finally, it should be added that so called gravity / gauge theory correspondence in string theory suggests that quantum-gravitational traces of miniature "wormholes" are present even within ordinary quantum-field theory, as *any* quantum entangled system (i.e. Einstein-Podolsky-Rosen correlated quantum pair) is connected by some sort of miniature (non-traversable) "wormhole" (i.e. quantum-gravitational Einstein-Rosen bridge) [154]; (as stated previously, its possible traversability in cosmological conditions was subject of ref. [152]).
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